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Afrotropical Tabanidae (Diptera): The genus Philoliche Wiedemann, subgenus Ommatiosteres Enderlein

by

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SYNOPSIS

The subgenus *Ommatiosteres* Enderlein of *Philoliche* Wiedemann is revised and the following six new species are described and figured: *flava, flavitibialis, londti, omanensis, peringueyi, stuckenbergi. P. (O.) discors* Austen and *P. (O.) littoralis* Oldroyd are raised to full specific status, having been previously placed as subspecies of *P. (O.) beckeri* Bezzi. *P. (Maverica) ingrata* Oldroyd is now placed in subgenus *Ommatiosteres* and the male is described. *P. nigricornis* Bigot is removed from synonymy under *P. (O.) lateralis* Fabricius and becomes a senior synonym of *P. (Buplex) brincki* Oldroyd. The female of *P. (O.) comata* Austen is recognised for the first time as is the male of *P. (O.) marriotti* Usher. *P. (O.) hispanica* Krober is recognised as a species distinct from *P. (O.) lateralis* Fabricius and the male is described.

INTRODUCTION

The main purpose of this paper is to reassess the names used in *Ommatiosteres*, particularly to establish changes that have become necessary since Oldroyd's (1957) revision, and to describe six new species.

During the course of this work it was found that the characters used for distinguishing *Ommatiosteres*, in particular from *Buplex*, were not entirely satisfactory and I think a review of this is necessary here. *Ommatiosteres* was first placed as a subgenus of *Philoliche* by Oldroyd (1957). He distinguished it from the other subgenera on the following characters: the bases of the antennae close together, tomentose face, proboscis without filamentous outgrowths from the pseudotracheae, fourth posterior cell open, first posterior cell usually closed, and no raised ocelli on frons. Oldroyd used the last two of these characters to separate *Ommatiosteres* from *Buplex*, although he indicated that the first was not wholly reliable (e g. *lateralis* Fabricius usually has this cell open and *P. (Buplex) basalis* Oldroyd has the cell closed well before the wing margin). Unfortunately the question of presence or absence of raised ocelli is also somewhat unsatisfactory and, as shown below, leaves the position of *Ommatiosteres* in some doubt, particularly since *bifasciata* Wiedemann (= *lateralis* Fabricius), the type species of *Ommatiosteres*, is intermediate.

It will be noted from the descriptions of male *ingrata* Oldroyd, *lateralis* Fabricius and *hispanica* Krober that, unlike other species placed in subgenus *Ommatiosteres*, all three have a distinct tubercle at the vertex, thus rendering them indistinguishable at the subgeneric level from males of some species of *Buplex* that have a distinct tubercle without ocelli (see key for specific differences). However, females of *ingrata, lateralis* and *hispanica*, like the other species placed in *Ommatiosteres*, have no more than a vestigial tubercle at the vertex (most distinct in *ingrata*—Fig. 1) without ocelli, whereas females of *Buplex* always have distinct ocelli at the vertex though these are not always particularly prominent (e g. some examples of *basalis* Oldroyd). Maintenance of two subgenera here thus relies on characters of one sex. The problem is to decide which of the sexes should be used. The females would be preferable with regard to the current positions of the names *Ommatiosteres* and *Buplex* but seem not as well differentiated. The males would be somewhat easier to use taxonomically but this would involve synonymising *Buplex* under *Ommatiosteres* and finding a new name for those species other than *ingrata, lateralis* and *hispanica* currently placed in *Ommatiosteres*. The alternative would be to merge the two subgenera together. There are, however, other problems at the subgeneric level involving *Ommatiosteres*. The first is the position of *atricornis* Wiedemann which is exceptional in having an equally wide frons in both male and female. The second is the question of relationships between species such as *lateralis* and *ingrata* which have partially shining faces and species of the subgenus *Phara* which have the face entirely shining. For the present I have decided to leave these positions unchanged since the problems of characterising subgenera in *Philoliche* need to be looked at again over the entire genus including Oriental and Australasian species.

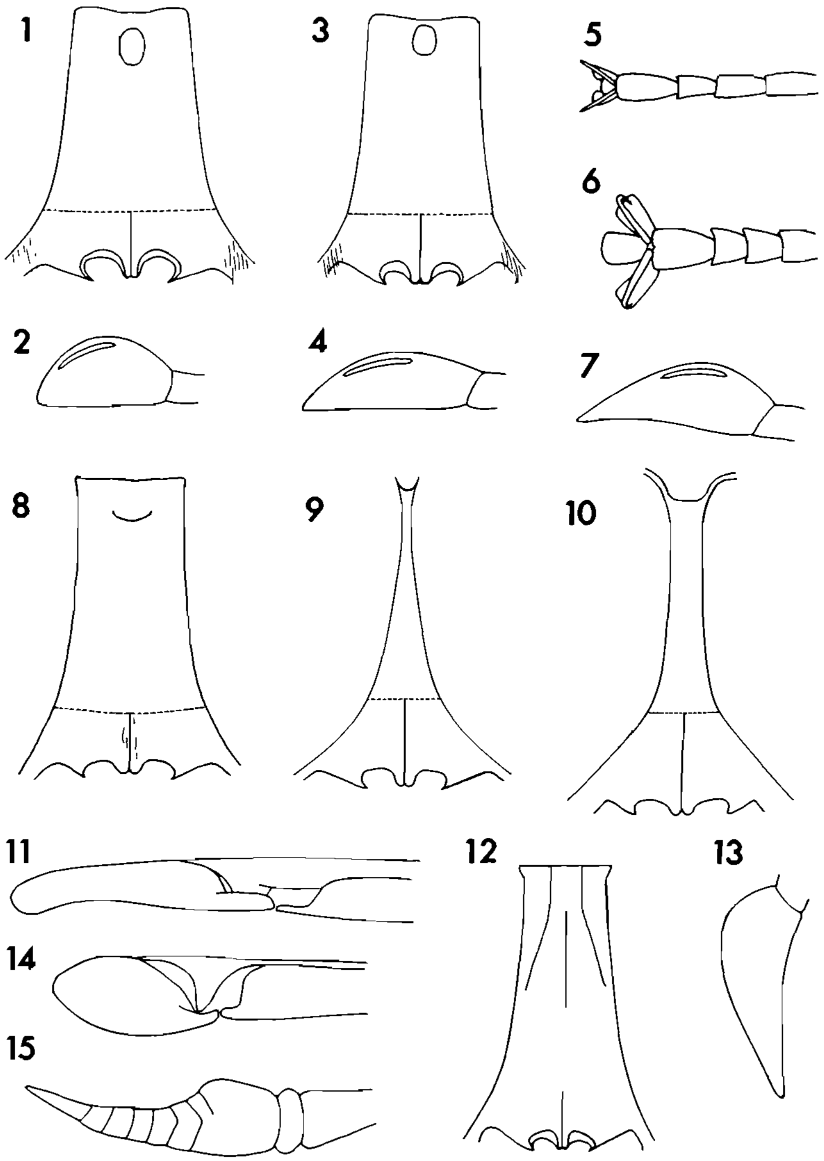
In descriptions it should be noted that the frontal index, i e. the width of the frons at its base against its length, may be rather approximate because the subcallus is often poorly defined in this group. Considerable use has been made of the shape and proportions of the proboscis labellae, a character that has been given little previous attention. Unless otherwise indicated, the form of the antennae in this group is similar to that of *beckeri* Bezzi (Fig. 27).

Philoliche (Ommatiosteres) comata Austen

Here I am grouping several specimens that appear quite different superficially but which seem to be best treated as colour forms of the same species. Structurally they are very similar. The female description below is of the form most different from typical *comata*, for comparison with previous descriptions.

Head: Frons (Fig. 34) rather narrow (index 1,75), somewhat divergent with dark grey tomentum and a large triangular shining black callus. Subcallus hardly defined, dark grey pollinose. Face not unusually swollen, grey pollinose with whitish hairs at sides. Parafacials dark grey pollinose. Buccae shining black-brown. Beard yellow, occipital rim whitish with mostly black hairs above and yellow hairs below. Antennae dark brown; scape and pedicel with thin blackish tomentum and black hairs. Palpi (Fig. 35) narrow, dark brown—segment 2 tapered to a fine point. Proboscis with noticeably slender labellae (cf. Fig. 24—*littoralis*), slightly less than twice height of head in length, black.

Thorax: Mesonotum, notopleural lobe, postalar callus and scutellum subshining black-brown through thin grey tomentum (tomentum on mesonotum thicker anteriorly and along transverse suture), faint sublateral stripes on mesonotum



Figs 1–15. (1–2) ♀ *Philoliche ingrata* Oldroyd: (1) frons, (2) palp. (3–5) *P. lateralis* Fabricius: (3) ♀ frons, (4) ♀ palp, (5) ♂ fore-tarsi. (6–8) *P. hispanica* Krober: (6) ♂ fore-tarsi, (7) ♀ palp, (8) ♀ frons. (9) ♂ *P. caffra* Macquart: frons. (10–11) ♂ *P. peringueyi* sp. n.: (10) frons, (11) proboscis. (12–15) ♀ *P. londti* sp. n.: (12) frons, (13) palp, (14) proboscis, (15) antenna.

(distinct anteriorly), hairs mostly yellow. Pleura and coxae grey with mostly yellow hairs. Legs black-brown with concolorous hairs. Wings tinted light yellow-brown. Vein R_4 with long appendix, R_5 smoothly curved. Squamae pale yellow. Halteres brown.

Abdomen: Unusually long and tapered in appearance. Tergite 1 black-brown basally with concolorous hairs, otherwise orange through thin white tomentum, hairs mostly whitish. Rest of tergites red-brown becoming darker apically with indistinct yellow hind-margins and entirely golden hairs except for a median blackish spot basally on tergite 2 which is black haired. Sternite 2 red-brown with whitish hind-margin and mostly white hairs. Rest of sternites similar to tergites but with black hairs mixed with the golden hairs.

Lengths: Body 13,5 mm, wing 12,5 mm.

Type material: Austen's description was based on 3 ♂ syntypes. Although he did not designate a holotype, one of the specimens was clearly labelled as 'type'. Since this specimen is in rather better condition than the other two it is hereby designated as lectotype.

Material examined: KENYA: ♂ Lectotype & 2 ♂ paralectotypes, Rabai, 15.iii.1912, S. A. Neave (BMNH); 1 ♂, near Mombasa, Diani Beach, F. X. Williams (MCZ); 2 ♀, Sokoke Forest, 8.v.1976 (BMNH); 1 ♀, Marafa, 26.vi.1969, J. N. Mbutu (BMNH); 1 ♂, Ukunda, 19.iii.1969, J. N. Mbutu (BMNH). TANZANIA: 1 ♀, Maom. [? = Maome], 23.iii.1964 (BMNH); 1 ♀, Longura [? = Longwa], iv.1914 (BMNH).

Variation: There is some apparent variation in body shape due to telescoping inwards of the apical abdominal segments in some specimens. This is particularly true of the 3 ♂ syntypes (not 2 as stated by Oldroyd) which appear to have been killed before they had properly hardened. Most variation, however, concerns the colour of the abdomen and the body hairs. In both sexes the hairs on the head and thorax may be white or yellow. Of the 5 ♂ studied, the 3 syntypes have the basal abdominal tergites almost black, 1 specimen has tergites 2 and 3 dark brown and one has tergites 2–4 red-brown. All of these have prominent pale hind-margins on tergites 1, 2 and 4—the 4 darker specimens have these hind-margins white haired and the paler specimen has them mostly yellow haired. Ventrally all 5 specimens show little variation. All 5 ♀ are red-brown on the tergites down to at least tergite 3. One has the hairs similarly arranged as in the white-haired males but has the hind-margins narrower and less distinct. Another is probably similar to this but is too greasy dorsally for me to be sure. Ventrally both are similar to the males. The other 3 ♀ have the tergites mainly golden haired (as in description) although one has some black hairs mixed with these on tergites 2 and 3. Ventrally all have mixed dark and golden hairs but with some variation in the relative proportions of these.

Remarks: *P. comata* appears to be similar to *acutipalpis* Enderlein but differs in having a much narrower frons, entirely black-brown legs and a dark median spot on tergite 2.

The filamentous outgrowths on the pseudotracheae mentioned by Oldroyd

(1957) are only visible if the labellae are splayed open and do not appear to be a unique feature of the species.

Oldroyd (1957) suggested that *acutipalpis* might prove to be conspecific with *rodhaini* Bequaert, but the specimen on which he based this (♀ from Tanzania, Longura) belongs with *comata*. *P. rodhaini* differs from *comata* in being stouter with body of normal proportions, shorter, stout proboscis (Fig. 33) with large labellae, dark brown wings, and tergite 1 having only dark hairs.

Philoliche (Ommatiosteres) discors Austen, **stat. rev.**

Pangonia discors Austen, 1920: 147
Philoliche (Ommatiosteres) beckeri ssp. *discors* Austen, Oldroyd 1957: 378

Still known only from the holotype, *discors* remains uncertainly placed. Oldroyd (1957) treated it as a subspecies of *beckeri* Bezzi, regarding the type locality, Angola, as requiring confirmation. I am more inclined to regard it as distinct. Apart from the taxonomic differences involved, I consider it preferable not to use the subspecies taxon in situations of this sort since it implies a greater knowledge of the insects than is available. *P. discors* differs from *beckeri* in slightly larger size, more diverging frons, slightly more prominent face, pale yellow beard, red-brown antennae, longer, heavier proboscis, less shining mesonotum, pleura and coxae without contrasting pale areas, dull orange, golden haired tibiae contrasting with black-brown femora, basal area of wing more contrastingly pale yellow, more extensive white pattern on tergites 1 and 2 and rest of tergites entirely black with concolorous hairs.

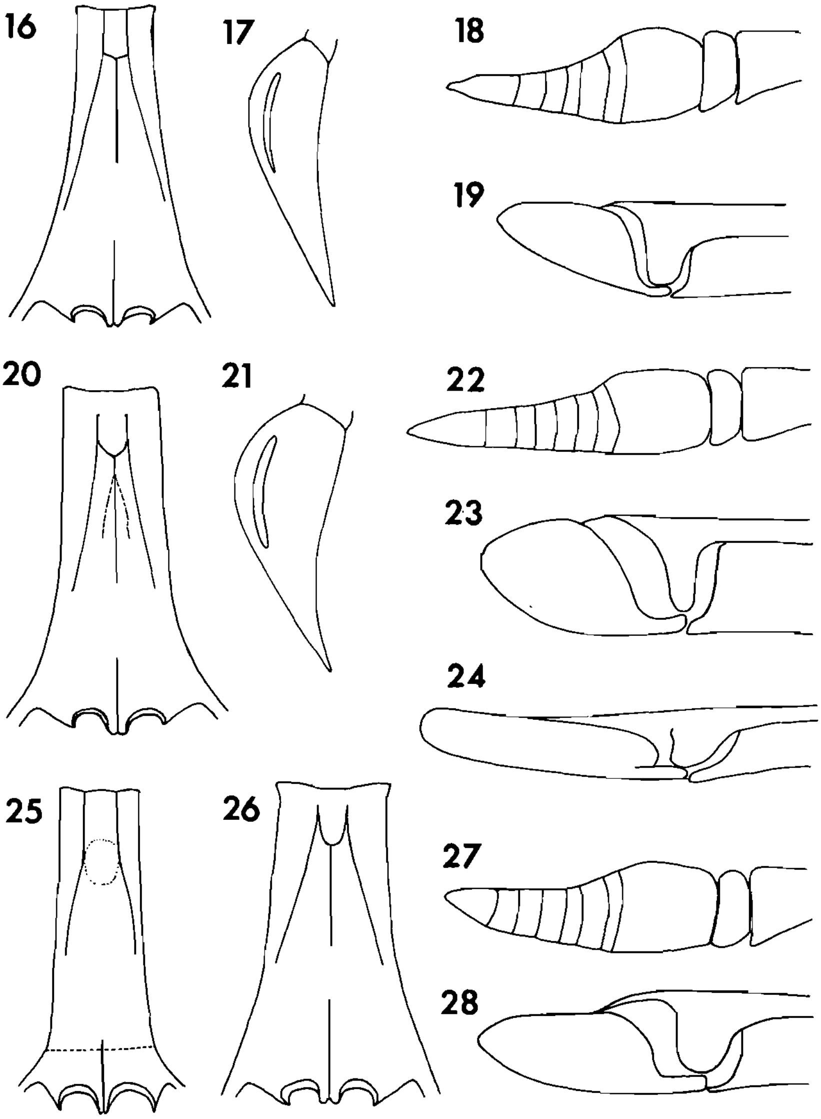
Philoliche (Ommatiosteres) flava sp. n.

Description: Holotype ♀.

Head: Frons (Fig. 16) divergent (index 1,6), pale yellow pollinose basally, otherwise red-brown with three longitudinal grooves running down upper two-thirds. Subcallus, face and parafacials pale yellow pollinose, appearing red-brown at certain angles. Face with pale yellow hairs laterally. Buccae subshining red-brown. Ocellar rim narrowed towards vertex, whitish pollinose with orange hairs. Beard bright yellow. Antennae (Fig. 18) orange; scape and pedicel with very thin grey tomentum, flagellum with only 7 visible flagellomeres, terminal flagellomere relatively long. Palpi (Fig. 17) red-brown with yellow hairs, second segment narrow, tapering to a fine point, a distinct groove running along upper part of segment. Proboscis (Fig. 19) slightly longer than head is high, black.

Thorax: Mesonotum, except lateral margins, black-brown with narrow sublateral red-brown stripes. Lateral margins of mesonotum red-brown. Entire mesonotum covered with golden yellow hairs. Notopleural lobe with an apical patch of grey tomentum and whitish hairs, otherwise similar to adjoining areas of mesonotum. Postalar callus red-brown with tufts of golden yellow hairs. Scutellum dark brown (slightly paler than mesonotum) with yellow hairs. Pleura and coxae red-brown, hairs concolorous on mesopleuron (except posterior margin) but otherwise bright yellow. Legs orange with concolorous hairs, except a few dark hairs on the femora. Wings basally pale yellow, otherwise uniformly brown except for small clearer spots in a few cells. Yellow area extends to stigma, basal third of discal cell and basal half of axillary cell. Squamae pale yellow. Halteres orange-yellow.

Abdomen: Tergites 1 and 2 red-brown with golden hairs except for apical white band on tergite 2 which has white hairs and is somewhat expanded sublaterally. Rest of tergites dark brown (at least partly due to greasing in the holotype) excepting tergite 3 basally, tergite 6 apically and tergite 7 which are red-brown, with



Figs 16–28. (16–19) ♀ *Philoliche flava:* (16) frons, (17) palp, (18) antenna, (19) proboscis. (20–23) ♀ *P. omanensis* sp. n.: (20) frons, (21) palp, (22) antenna, (23) proboscis. (24–25) ♀ *P. littoralis* Oldroyd: (24) proboscis, (25) frons. (26–28) ♀ *P. beckeri* Bezzi: (26) frons, (27) antenna, (28) proboscis.

golden hairs excepting a few dark hairs just before the hind-margin of tergite 3. Sternite 2 red-brown with yellow hairs and with an apparent blackish stripe which is expanded apically (probably an effect of greasing) and with a broad white apical band which is white haired. Sternite 3 mostly dark brown with golden hairs. Rest of sternites red-brown with golden hairs.

Lengths: Body 15 mm, wing 12,5 mm.

Material examined: Holotype ♀: SOUTH YEMEN: Hadhramaut, Jol. 10 ml. S. of fort at top of Jahi Pass, 9.viii.1949, K. Guichard (BMNH).

Remarks: This species differs from its closest relatives, *beckeri* Bezzi and *omanensis* sp. n., in its smaller size, overall red-brown, golden haired coloration and antennal flagellum with only seven flagellomeres.

Philoliche (Ommatiosteres) flavitibialis sp. n.

Description: Holotype ♀.

Head: Frons (Fig. 37) divergent (index 1,75), pale yellow pollinose (appearing brown at certain angles) becoming subshining brown at vertex. Three longitudinal grooves running down upper two-thirds of frons, a subshining dark brown area around the middle groove. Subcallus poorly defined, pale yellow pollinose. Face and parafacials pale yellow pollinose, without hairs. Buccae shining black-brown. Ocellar rim whitish with light brown hairs. Beard cream-coloured. Antennae orange; scape and pedicel being slightly darker with thin grey tomentum and dark hairs. Palpi (Fig. 38); segment 1 narrow, shining dark brown, segment 2 broad basally but sharply tapering to a relatively fine point, dull orange. Proboscis (Fig. 36) slightly less than 1,5 height of head, black.

Thorax: Mesonotum shining black-brown, with somewhat obscure grey pollinose sublateral stripes on anterior half and along transverse suture; overlain with rather thinly distributed (denser laterally) golden hairs. Humeral and notopleural lobes pale yellowish-grey pollinose with golden hairs. Postalar callus with golden tufts of hair. Scutellum shining black-brown with golden hairs. Mesopleuron dark brown with dull golden hairs, rest of pleura greyish pollinose with lighter golden hairs. Fore-coxae dark brown with long pale yellow hairs. Mid and hind-coxae with golden hairs. Femora black-brown with mixed black and dull golden hairs. Tibiae and tarsi contrastingly orange with yellow hairs. Wings basally pale yellow, apically light grey-brown; the yellow area extending to, and including, stigma and basal third of axillary cell. Vein R_4 with long appendix, R_5 with short appendix. Squamae yellow. Halteres brown.

Abdomen: Dorsum black except for hind corners of tergite 2 which are indistinctly orange. Tergite 1 and basal half of tergite 2 with golden hairs. Rest of tergite 2 with thin grey tomentum covered with white hairs—this area expanded sublaterally and also covers the orange areas described above. Rest of tergites have the hind margins thinly grey pollinose with whitish hairs except tergites 6 and 7 which are mostly golden haired. Sternite 2 dark brown basally with pale yellow hairs, but mostly with thin grey tomentum and white hairs. Rest of sternites similar to tergites.

Lengths: Body 13,5 mm, wing 12 mm.

Material examined: Holotype ♀: NAMIBIA: Ameib Farm, 19 ml NW of Karibib, 31.i.–2.ii.1972, BMNH South African Expedition (BMNH).

Remarks: This species differs from most others in the subgenus in having strongly bicoloured legs. Three species in southern Africa, i e *caffra* Macquart, *marriotti* Usher and *nitida* Usher, do have bicoloured legs, but these are distinguished by being larger with many long hairs on the frons and distinct median triangles on the tergites.

Philoliche (Ommatiosteres) hispanica Krober **stat. rev.**

Corizoneura hispanica Krober, 1921: 14.
Stonemyia hispanica (Krober), Leclercq 1960: 17, Chvala, Lyneborg & Moucha 1972: 68.
Philoliche (Ommatiosteres) hispanica (Krober), Schacht & Portillo 1982: 171 (as syn. of *lateralis* Fabricius).

Corizoneura hispanica Krober was, as the name suggests, described from Spain. Leclercq (1960) placed it in the Holarctic genus *Stonemyia* as did Chvala *et al.* (1972) who gave a description of the type but did not question its identity or origin. Schacht & Portillo (1982) first recognised that it was not Palaearctic, but Afrotropical, and they placed it as a synonym of *P. (O.) lateralis* Fabricius. I have seen the holotype ♀, which has the abdomen greasy but is otherwise in good condition, and find it to be the same as material of a distinct species that I had earlier thought to be new. A full description is given below.

Head: Frons (Fig. 8) slightly divergent (index 1,6), subshining red-brown through pale yellowish-grey tomentum, with a mixture of pale yellow and black hairs along lateral margins. Subcallus indistinct, yellowish-grey pollinose, with a few pale yellow hairs medially. Face broad, protruding beyond level of antennal bases, yellowish-grey pollinose with long whitish hairs laterally and apically. Parafacials narrow, yellowish-grey pollinose, without hairs. Buccae subshining brown. Beard white. Antennae; scape and pedicel red-brown with thin grey tomentum and light and dark hairs, flagellum orange-brown. Palpi (Fig. 7); segment 1 narrow, dark brown with whitish hairs, segment 2 short, broad at base, tapering to a fine point, a distinct groove running along upper part of segment. Proboscis slightly longer than head is high, black.

Thorax: Mesonotum brown pollinose with indistinct greyish median and sublateral stripes, clothed with thick yellow-brown hairs (a few black hairs mixed in with these). Notopleural lobe similar to adjoining areas of mesonotum. Tufts of whitish hairs at wing base and on postalar callus. Scutellum yellow brown pollinose with thick yellow-brown hairs. Pleura and coxae brown with long pale yellow hairs. Legs entirely orange with fringes of both pale yellow and black hairs. Wings light brown—first posterior cell closed on margin, R_4 with long appendix, R_5 smoothly curved. Squamae pale yellow. Halteres brown.

Abdomen: Tergite 1 extensively orange with small blackish spot below scutellum, hind-margin whitish medially and yellow haired except on the blackish and whitish areas mentioned which have concolorous hairs. Tergite 2 orange with blackish median spot (with concolorous hairs) which is slightly under a third of the width of the segment, hind-margin with white patches medially and on corners—these areas with whitish hairs, a few dark hairs laterally otherwise rest of tergite yellow haired. Tergite 3 black-brown with yellow-brown hind-margin, this with yellow hairs, the dark area with mostly black hairs but with some yellow hairs mixed in with these. Tergite 4 similar except for hind-margin which is whitish with white hairs. Tergites 5–7 black-brown with lateral tufts of white hairs. Sternite 1 greyish pollinose with whitish hairs. Sternite 2 yellow-brown with white hind-margin and mostly whitish hairs. Rest of sternites similar to tergites.

Lengths: Body 13,5 mm, wing 12,5 mm.

Description of ♂: Eyes almost touching, divided by a line of black hairs. A distinct tubercle at vertex. Fore-tarsi (Fig. 6) short and broad with conspicuously large claws and pulvilli. Orange colour on abdomen more extensive than in ♀, leaving only small dark median marks on tergites 1–3. Otherwise similar to ♀.

Material examined: Holotype ♀: 'Type/Type von Krober ex coll. Engel/*Corizoneura* ♀ *hispanica* Krober, det. O. Krober 1919/888/*aperta* Lw. ex coll. Lw., Spanien [error]/*lateralis*/*Philoliche (Ommatiosteres) lateralis* Fabr., det. W. Schacht 1982', ZSM.

Other material: SOUTH AFRICA, *Cape Province:* 1 ♀, Cape of Good Hope Saunders (BMNH); 1 ♀, Sea Point, xi.1931–i.1932, J. Ogilvie (BMNH); 1 ♀, no locality, Dr A. Smith (BMNH); 1 ♀, no locality, 13.v.1933, R. E. Turner (BMNH); 1 ♀, Stellenbosch, 20.xi.1924, Dr Brauns (NM); 1 ♀, Worcester, Fairy Glen, 15–19.x.1966, Vari & Potgieter (NM); 1 ♂, Somerset West, xi.1940, R. Smithers (BMNH); 3 ♂, no locality, (J. Bigot coll.) (BMNH); 1 ♂ [Mexico—error], (J. Bigot coll.) (BMNH); 1 ♂, Stellenbosch, 1.viii.1925, Dr Brauns (NM); 5 ♂, Seweweekspoort, 4–6.xii.1968, Potgieter & Jones (NM); 1 ♀, Port Alfred, 4.xii.1953, C. B. Cottrell (BMNH).

Variation: This species shows minor variation in ♀ frons width (indices 1,5–1,6), wing venation (first posterior cell open or closed on margin), abdominal pattern (orange colour may extend to tergite 3 in ♀) and size (13,5–15,0 mm).

Remarks: *P. hispanica* is close in appearance to *lateralis* Fabricius but is readily distinguished by having no hairs laterally on the subcallus and, in the ♂, by having shorter, broader fore-tarsi with conspicuously large claws and pulvilli (Fig. 6). Additionally *hispanica* is slightly larger, with usually narrower frons in ♀, entirely pollinose face (but beware worn specimens), shorter proboscis, more densely haired mesonotum and more extensive orange colouring on the basal tergites with less extensive white medially on tergite 2. Also related is *ingrata* Oldroyd for which distinguishing characters are given in discussion of that species.

Philoliche (Ommatiosteres) ingrata Oldroyd

Philoliche (Maverica) ingrata Oldroyd, 1957: 410.

This was rather uncertainly placed by Oldroyd (1957) in his subgenus *Maverica*. He considered that the combination of a partly shining face and rather closely placed bases of the antennae made it intermediate between *Maverica* and subgenus *Phara* Walker. From the material seen, including the holotype ♀ in SAM, I consider that *ingrata* has closer affinities with *P. lateralis* Fabricius and *hispanica*

Krober and should be placed with them in *Ommatiosteres*. *P. lateralis* is particularly close since it has the centre of the face shining (*hispanica* may show this in worn specimens). This relationship was somewhat reinforced by the fact that one of the *ingrata* paratypes proved to be *lateralis* and 2 ♂, 2 ♀ of *ingrata* were found among the series of *lateralis* in BMNH. *P. ingrata* differs from *lateralis* in having a more extensive shining area on the face, shorter, blunter palpi (Fig. 2), femora darkened at apices, clearer wings with a faint brown median band running down the apices of basal cells and, in ♀, little or no orange colour on basal tergites and the complete whitish hind margin on tergite 2 not expanded medially. From *hispanica*, *ingrata* differs in having many hairs on the sides of the subcallus and, in ♂, relatively inconspicuous fore-tarsal claws and pulvilli.

The male of *ingrata* has not previously been recognised. Apart from usual sexual differences it is similar in appearance to the female except for the first two tergites which are extensively orange laterally. The eyes are touching for a short distance just below vertex but are divided by a line of dark hairs. There is a distinct tubercle at vertex. Association of these males with *ingrata* was first made on account of the partly shining faces and relatively clear wings with a faint brown median band running through the apices of the basal cells.

Material examined: SOUTH AFRICA, *Cape Province:* 1 ♀ holotype, Oudtshoorn District, Rust en Vrede, x.1951 SAM; 1 ♀ paratype, Oudtshoorn District, Zebra, x.1951 (BMNH); 1 ♀, Kamieskroon, 23.ix.1956, C. B. Cottrell (BMNH); 1 ♀, Outeniqua Pass, 2.x.1956, C. B. Cottrell (BMNH); 2 ♂, Namaqualand, Bowesdoorp (BMNH).

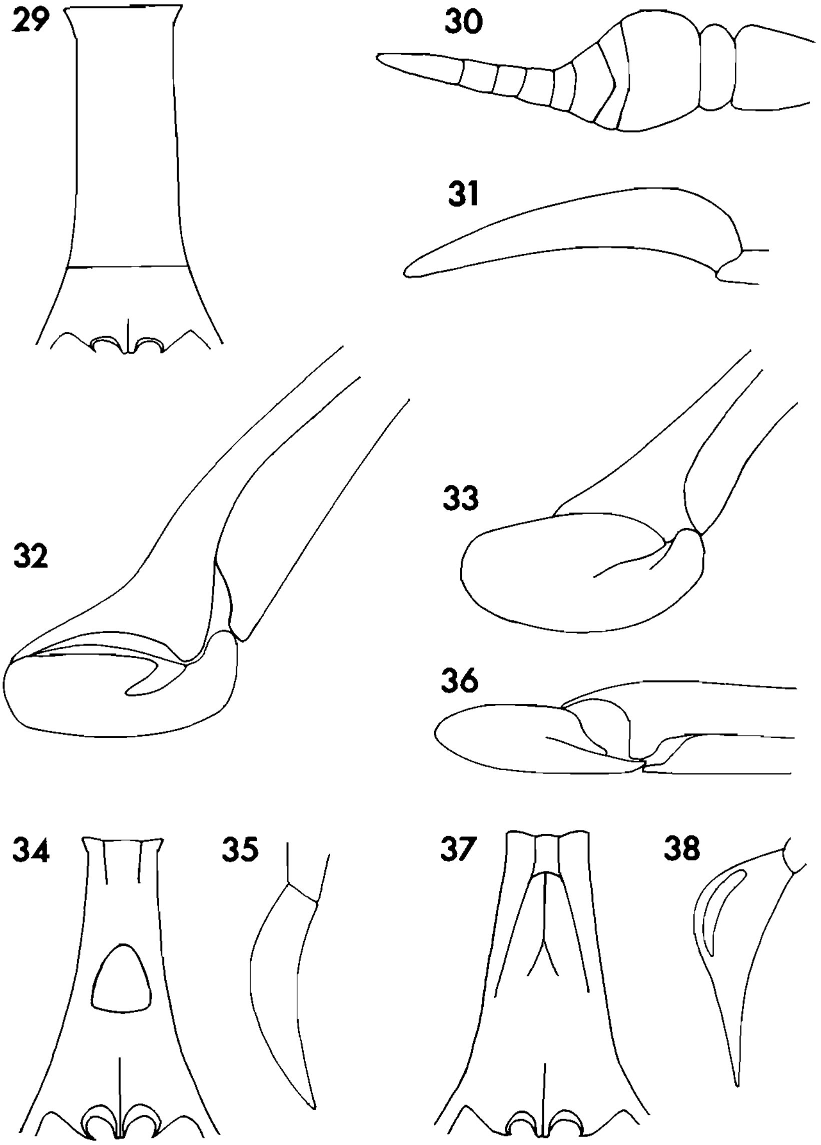
Philoliche (Ommatiosteres) lateralis Fabricius

Pangonia lateralis Fabricius, 1805: 91
Pangonia bifasciata Wiedemann, 1821*a*: 8 [1821*b*: 58]
Tanyglossa thoracica Thunberg, 1827: 71

Oldroyd's (1957) description of *lateralis* was based, at least in part, on *hispanica*, since the subcallus is stated to have no hairs. For this reason a full description of *lateralis* is given below, which is based on the series in BMNH and material in NM.

♀ *Head:* Frons (Fig. 3) divergent (indices 1,2–1,5, usually 1,25), subshining red-brown through yellowish-grey tomentum, with long light yellow and black hairs laterally. Subcallus indistinct, whitish or pale yellow pollinose, with many concolorous hairs laterally. Face shining brown medially, becoming yellowish-grey pollinose laterally, with long white or pale yellow hairs laterally. Parafacials similar to subcallus. Buccae brown through thin tomentum. Beard white or cream-coloured. Antennae; scape and pedicel red-brown through thin grey tomentum with light and dark hairs, flagellum orange-brown. Palpi (Fig. 4); segment 1 narrow, dark brown with whitish hairs, segment 2 short, narrow, usually blunt tipped with a rather indistinct groove running along upper part, dark brown. Proboscis 2–3 × height of head in length, black.

Thorax: Mesonotum dark brown pollinose with often distinct grey sublateral stripes, but without median stripe, rather sparsely yellow-brown and black haired.



Figs 29–38. (29–32) ♀ *Philoliche stuckenbergi* sp. n.: (29) frons, (30) antenna, (31) palp, (32) proboscis. (33) ♀ *P. rodhaini* Bequaert: proboscis. (34–35) ♀ *P. comata* Austen: (34) frons, (35) palp. (36–38) ♀ *P. flavitibialis* sp. n.: (36) proboscis; (37) frons, (38) palp.

Notopleural lobe similar to adjoining area of mesonotum. Base of wing and postalar callus with whitish tufts. Scutellum grey-brown pollinose with yellow-brown hairs. Pleura grey-brown with long whitish or pale yellow hairs. Legs entirely orange with mixed black and yellow hairs. Wings light brown tinted with first posterior cell usually narrowed and occasionally closed at margin. R_4 with long appendix. Squamae pale yellow. Halteres dark brown.

Abdomen: Tergite 1 medially black-brown pollinose with concolorous hairs; sometimes bordering this is a fairly narrow grey pollinose area; laterally orange with yellow hairs. Tergite 2 with large median black-brown spot with concolorous hairs—this covering just under half the width of the tergite; laterally orange with mainly yellow hairs but with a small patch of black hairs also; hind-margin white, expanded into median triangle, mostly white haired except some pale yellow hairs sublaterally. Tergite 3 black-brown with concolorous hairs except hind-margin which is yellow-brown with yellow hairs. Tergite 4 similar but with white hind-margin and concolorous hairs. Rest of tergites black-brown with white tufts of hair on hind corners. Sternite 1 grey pollinose with whitish hairs. Sternite 2 yellow-brown with white hind-margin, mostly white haired. Rest of sternites black brown with yellowish-brown hind-margins except sternite 4 which has a white hind-margin, hairs mostly white or yellow but mixed with some black hairs.

Lengths: Body 11–13 mm, wing 10,5–11,5 mm.

♂. Eyes narrowly separated, divided by a narrow strip of tomentum and long dark hairs. A distinct tubercle at vertex. Fore-tarsi (Fig. 5) longer and more slender than in *hispanica* Krober and with relatively inconspicuous claws and pulvilli. More extensively orange on tergites than ♀, usually extending to tergite 3 and leaving a smaller median dark spot on tergite 2. Otherwise similar to ♀.

Synonymy

Pangonia lateralis Fabricius, 1805. I have seen both syntypes (1 ♂, 1 ♀) from ZM. The male has just a type label, but the female bears a handwritten label '*P. lateralis* e C B Sp'. Except that the male has suffered some pest damage to the eyes, both specimens are in good condition. Both are clearly the same species and the female is hereby designated lectotype.

Pangonia bifasciata Wiedemann, 1821. I have seen 2 ♀ from NMW. Both bear a printed 'coll. Winthem' label with '*bifasciata*' added in, and a handwritten label 'Cap'; they are in good condition. Neither has a type label but the specimens are here treated as syntypes of *bifasciata*. Fortunately both specimens are clearly the same as *lateralis*.

Tanyglossa thoracica Thunberg, 1827. I have seen all three ♀ syntypes from UU. One stands under a handwritten label '*thoracica* alpha' and the other two under a similar label '*thoracica* beta'. The alpha ♀ is in good condition except that the antennal flagella are missing and is hereby designated lectotype. One of the beta ♀ is somewhat mouldy, and the other has both fore-legs and one mid-leg missing and has the head glued on.

Other material examined: SOUTH AFRICA, *Cape Province:* 4 ♀, Eland's Bay, Leipoldtville, xi.1948 (one of these determined as a paratype of *Philoliche (Maverica) ingrata* Oldroyd); 1 ♀, near Uitenhage, 25.xi.1953, C. B. Cottrell; 1 ♀, Mossel Bay, 1–14.xi.1941, R. E. Turner, 1 ♀, 'Afrique Delalande'; 1 ♀, Wallekraal, x.1950; 4 ♀, no data (Bigot coll.); 1 ♂ 1 ♀, Cape Town to Cape Point, 1–5.xi.1930, H. W. Simmonds; 1 ♂ 1 ♀, Viljoens Pass, 40 ml. from Cape Town, 7.xii.1930, H. W. Simmonds, 1 ♂ 2 ♀, Port Elizabeth, 29.x.1931, Mrs L. Ogilvie; 6 ♂ 1 ♀, Storms River, 14.x.1959, D. J. Greathead; 1 ♀, Bredasdorp District, Arniston Coastal Dunes, 22–23.x.1964, B. R. & P. J. Stuckenberg; 1 ♀, no data R. E. Turner; 1 ♀, Gordon's Bay, 31.x.1954, C. H. Andrews; 1 ♀, Cape Point, 30.x.1954, C. H. Andrews; 1 ♂, Table Mountain, 29.x.1954, C. H. Andrews; 1 ♂, near Gorre, 4–7.xi.1931, Ogilvie coll.; 3 ♂, Kuyana, 6.xi.1931, Mrs L. Ogilvie, 1 ♂, Knysna, R. E. Turner; 1 ♂, Simons Town, xi.1892, P. de la Garde. All BMNH. 7 ♀, Cape of Good Hope Nature Reserve, 27–28.x.1966, Vari & Potgieter; 1 ♀, Tsitsikama area, Coldstream, 25–28.x.1964, B. R. & P. J. Stuckenberg; 2 ♀, South-west Cape, Atlantic Coast, Ysterfontein, 20.x.1964, B. R. & P. J. Stuckenberg; 1 ♀, Tsitsikama Coastal National Park, 8.xii.1979, J. G. H. Londt & B. R. Stuckenberg, open area with flowers; 1 ♂, Port Elizabeth, Zwartkops River, coastal dunes, 29.xi.1964, B. R. Stuckenberg; 1 ♂, Saldanha, 8–9.xi.1977, R. M. Miller; 1 ♂, Tygerberg, 19.x.1965, C. G. C. Dickson. All NM.

Variation: This is incorporated in the description.

Remarks: *P. lateralis* is close to *hispanica* Krober and *ingrata* Oldroyd, for differences see under these two species.

P. bifasciata Wiedemann (= *lateralis*) is the type species of *Ommatiosteres* Enderlein, as discussed in the introduction this is unfortunate since the male is indistinguishable at the subgeneric level from *Buplex* Austen. For the time being I have decided to leave this situation unchanged because of the need of a world review of the subgenera in *Philoliche.*

One species, *Corizoneura nigricornis* Bigot, has been removed from Synonymy under *lateralis* and is discussed at the end of this paper.

Philoliche (Ommatiosteres) littoralis Oldroyd, **stat. n.**

Philoliche (Ommatiosteres) beckeri ssp. *littoralis* Oldroyd, 1957: 379

Oldroyd (1957) considered that this was best treated as a subspecies of *beckeri* Bezzi. Following examination of the relevant series, which includes a typical *beckeri* taken in the same area (eastern Kenya) as *littoralis*, I think that these should be regarded as separate species. *P. littoralis* differs from *beckeri* in having a narrower, more parallel frons (Fig. 25), lower subcallus, less prominent face, blunter palpi, proboscis (Fig. 24) with more slender labellae, mesonotum with more extensive grey tomentum, contrasting light grey notopleural lobes, wings with axillary cell less contrastingly clear, basal area without yellow colour and abdomen with less extensive white pattern on tergites 1 and 2.

Philoliche (Ommatiosteres) londti sp. n.

Description: Holotype ♀.

Head: Frons (Fig. 12) somewhat divergent (index 1,6), golden-brown pollinose with mostly concolorous hairs, becoming subshining brown at vertex. Three indistinct grooves running down upper half of frons. Subcallus, face and parafacials yellowish-grey pollinose, face with concolorous hairs. Buccae shining brown. Beard cream-coloured. Occipital rim whitish with light brown hairs. Antennae (Fig. 15); scape and pedicel blackish with grey tomentum and blackish hairs, flagellum red-brown. Palpi (Fig. 13) black-brown with short pale hairs, second segment tapered to a point. Proboscis (Fig. 14) 1,25 × height of head in length, black.

Thorax: Mesonotum grey-brown pollinose with indistinct paler sublateral stripes anteriorly and along transverse suture and with mixed light brown and dark hairs. Notopleural lobe and postalar callus similar to adjoining areas of mesonotum. Scutellum similar but without dark hairs. Pleura and coxae grey with paler tomentum—hairs cream-coloured except for light brown hairs on mesopleuron. Femora black-brown (except for extreme tips which are contrastingly light brown) with mixed dark and golden hairs (mostly golden on hind-femur). Tibiae and tarsi slightly paler with mostly dark hairs. Wings smoky, costal cell, stigma and extreme base of wing somewhat yellowed but wings not distinctly patterned. Vein R_4 with appendix, R_5 with short appendix. Squamae pale yellow. Halteres dark brown with knob pale at tip.

Abdomen: Tergite 1 grey pollinose with pale hind-margin, somewhat orange laterally, with light brown hairs. Tergites 2, 4 and 5 black-brown with a continuous whitish hind-margin that is slightly expanded sublaterally. Hairs concolorous with background except for large brassy-haired median triangles. Tergite 3 similar but whitish hind-margin disappears sublaterally. Tergites 6 and 7 black-brown except for lateral whitish tufts of hairs. Sternite 1 grey with whitish hairs. Sternite 2 mostly whitish with white hairs. Sternite 4 with distinct white haired, whitish hind-margin but otherwise rest of sternites black-brown with dark hairs.

Lengths: Body 12 mm, wing 10 mm.

Material examined: Holotype ♀: SOUTH AFRICA, *Cape Province*: Meiringspoort, 11–12.xii.1979, J. G. H. Londt & B. R. Stuckenberg (NM). 1 ♀ paratype, same data, (NM). NM–2579.

Remarks: This species looks like very small specimens of *P. angulata* (Fabricius) f. *sexfasciata* Walker, but has the labellae globular in shape rather than long and thin.

Philoliche (Ommatiosteres) marriotti Usher

I have seen a recently collected series of 4 ♂ 1 ♀ of this species, which was previously known only from the holotype. The material was collected in the Cathedral Peak area of Natal, close to the type locality.

As the male is recorded for the first time the following short description is given: Apart from sexual differences ♂ is generally similar to ♀, but differs in having tergites 1–3 orange-brown laterally, leaving a broad median blackish stripe. Ventrally the orange-brown colour extends to the basal part of sternite 4. The eyes are practically touching just below the vertex, divided only by a line of dark hairs. There is no tubercle at the vertex.

Material examined: SOUTH AFRICA, *Natal:* ♀ holotype, Drakensberg N.P., south-east Cathedral area, vii.1946, W. E. Marriott, NM; 4 ♂ 1 ♀, Cathedral Peak area, 2829CC, *c.* 6000′, 4.viii.1982, D. A. Barraclough, NM, BMNH.

Variation: 1 ♂ 1 ♀ have vein R_5 smoothly curved and without an appendix and consequently the species has had to be keyed out twice. This vein has not been found to vary to this degree in other species e g. *angulata* Fabricius does not always have an appendix but does at least have the vein angled.

Remarks: This species is close to *caffra* Macquart but differs in having ♀ frons mostly black haired, yellow-brown tibiae with dark hairs and ♂ tergites 1–3 with less extensive orange-brown colour, leaving a broad median blackish stripe.

In Usher's (1965) description of *marriotti*, comment is made on the shiny condition of the face. The fresh specimens have the face only subshining medially and this feature of the holotype is regarded as being due to wear.

Philoliche (Ommatiosteres) omanensis sp. n.

Description: Holotype ♀.

Head: Frons (Fig. 20) somewhat divergent (index 1,8), basally light yellow pollinose, becoming browner at vertex. Three longitudinal grooves running down upper two-thirds of frons enclosing a dark brown subshining area. Subcallus, face and parafacials light greyish-yellow pollinose, face with white hairs laterally. Buccae shining black-brown. Beard cream-coloured. Occipital rim light greyish-yellow pollinose with light brown hairs. Antennae (Fig. 22) dark red-brown; scape with thin greyish tomentum and dark hairs, flagellum with terminal flagellomere relatively long. Palpi (Fig. 21) dark brown with yellow hairs. Second segment broad basally, tapering to a sharp point, a distinct groove running along upper part of segment. Proboscis (Fig. 23) slightly longer than height of head, black.

Thorax: Mesonotum shining black-brown (very slightly paler laterally) with thin grey tomentum, particularly anteriorly and laterally, and covered with yellow-brown hairs. A narrow bare line medially on mesonotum, particularly noticeable anteriorly. Notopleural lobe dark brown, similar to adjoining areas of mesonotum but with a small patch of whitish hairs apically. Postalar callus with tufts of long whitish hairs. Scutellum black-brown (slightly darker than mesonotum) with yellow-brown hairs. Pleura and coxae black-brown through thin grey tomentum, with dark hairs except for propleuron, posterior margin of mesopleuron, apical half of sternopleuron, ptero- and metapleura which have tufts of long cream-coloured hairs. Legs red-brown (tibiae and tarsi slightly paler) with golden hairs excepting some dark hairs on femora. Wings pale yellow basally, smoky apically—the grey-brown colour being somewhat concentrated along the veins. Yellow area extends to stigma, basal third of discal cell and basal two-thirds of axillary cell. Vein R_4 with long appendix, R_5 angled but without stump vein. Squamae pale yellow. Halteres red-brown.

Abdomen: Tergite 1 black-brown with somewhat indistinct grey hind-margin and with whitish hairs. Tergite 2 black-brown with rather broad white hind-margin, somewhat expanded sublaterally; the white area with entirely white hairs and the dark area with a mixture of white and black hairs, the white hairs being more concentrated anteriorly and in an indistinct median triangle. Tergite 3 black, with concolorous hairs except for some sparse light hairs along anterior and posterior margins and a very indistinct median triangle. Tergites 4 and 5 black with red-brown posterior margins, covered with recumbent pale yellow hairs. Tergites 6 and 7 red-brown—tergite 6 with yellow hairs and tergite 7 with golden hairs.

Sternites 1–6 black-brown (sternite 2 with broad white hind-margin) with light brown hairs on sternite 1, white hairs on sternite 2, mixed dark and pale yellow hairs on sternite 3, pale yellow hairs (becoming progressively more golden) on sternites 4–6. Sternite 7 orange with golden hairs.

Lengths: Body 17 mm, wing 15 mm.

Material examined: Holotype ♀: OMAN; Dhofar, Quara Hills, North Slopes, 670 m, 22.ix.1977, K. Guichard BMNH. 1 ♀ Paratype, OMAN; Dhofar, Jebel Qara, x.1943, D. V. Fitzgerald BMNH.

Variation: The paratype differs from the holotype in having only dark hairs on the black-brown part of tergite 2 and on tergite 3.

Remarks: *P. omanensis* belongs to a group of species that includes *beckeri* Bezzi, *bricchettii* Bezzi, *flava* sp. n. and *littoralis* Oldroyd. From *beckeri* it differs in possessing a paler, more yellow frons, more yellow subcallus, cream-coloured beard, red-brown antennae with long terminal flagellomere, mesonotum with yellow-brown hairs, pleura with cream-coloured hairs, red-brown legs, wings with more contrasting pattern, less extensive white pattern on tergites 1 and 2 and entirely pale yellow hairs on tergites 4 and 5. From *bricchettii* it differs in not having white hind-margins on all abdominal segments. From *flava* it differs in being larger, with black-brown body and more contrasting, less yellow pale hairs, antennae with usual 8 flagellomeres, broader palpi, mesonotum with bare median line, apical half of wing greyer, and contrast between dark hairs on tergite 3 and light hairs on tergite 4. From *littoralis* it differs in having a wider, more divergent frons, red-brown antennae, stouter proboscis, yellow-brown hairs on mesonotum, red-brown legs and contrasting wing pattern.

The paratype is the specimen Oldroyd (1957) referred to under *beckeri* as being 'with yellowish hair on the mesonotum, but otherwise typical', and is the basis for the inclusion by Chainey & Oldroyd (1980) of Oman in the distribution of *beckeri*. I do not think, however, that *omanensis*, or *flava*, should be regarded as forms of *beckeri*. The members of this group for which reasonable series are available, i e. *beckeri, elongata* Ricardo, *lautissima* Austen and *littoralis* are all remarkably constant in form. Apart from an absence of intermediates between *beckeri, omanensis* and *flava*, there are also apparent differences in times of emergence, i e. *beckeri* is recorded from April to June, *omanensis* from late September and October and *flava* from early August, and also distribution, i e. *beckeri* is known from Kenya, Somalia and Ethiopia, *omanensis* from Oman, and *flava* from South Yemen.

Philoliche (Ommatiosteres) peringueyi sp. n.

Description: Holotype ♂.

Head: Eyes dichoptic: frons (Fig. 10) somewhat divergent (index 3), brown pollinose with black hairs at vertex—somewhat paler basally. Subcallus, face and parafacials yellowish-grey pollinose. Face moderately produced, without hairs. Parafacials relatively wide. Buccae subshining dark brown. Beard pale yellow. Antennae dark brown with relatively long terminal flagellomere (as Fig. 22). Palpi narrow (as Fig. 35), segment 1 dark brown with long pale yellow hairs, segment 2 with short black hairs. Proboscis (Fig. 11) slender, 1,5 × height of head in length, black.

Thorax: Mesonotum and scutellum black-brown, overlain with brown tomentum and thick whitish hairs. Notopleural lobe similar to adjoining areas of mesonotum. Postalar callus with long pale yellow hairs. Pleura and coxae dark brown with thin grey tomentum and mostly pale yellow hairs. Femora and apices of tarsi dark brown, tibiae (particularly fore- and mid-tibiae) and bases of tarsi slightly paler—all with mostly black hairs. Wings hyaline with slight brown tinting around veins, particularly towards costa. Costal cell brown. Stigma pale. Vein R_4 with long appendix, R_5 with short appendix. Squamae pale yellow. Halteres dark brown.

Abdomen: Tergite 1 black-brown basally with orange hind-corners and obscurely marked pale hind-margin (more noticeable medially). Tergites 2–4 orange (hind-corners darker) with whitish pollinose hind-margins which are not expanded medially. Tergite 4 darker medially. Rest of tergites dark brown, also with whitish pollinose hind-margins though these are less obvious. Hairs whitish on hind-margins, expanded into median triangles, otherwise black. Venter orange, somewhat darker apically, with mostly whitish hairs but with a few black hairs on sternites 3–7.

Lengths: Body 17 mm, wing 15 mm.

Material examined: Holotype ♂: SOUTH AFRICA: Cape Town, 1913, G. Peringuey (BMNH).

Remarks: This species is distinguished by having entirely separated eyes, face without conspicuous patches of long hairs, relatively wide parafacials and the abdomen extensively orange. The closest species appear to be *caffra* Macquart and *marriotti* Usher which have the eyes practically touching near vertex (Fig. 9), dense patches of hairs on face, narrower parafacials, legs much more strongly bicoloured and yellow costal cell.

Also related is the variable *angulata* Fabricius; this is a much darker species, however, and the male has the eyes practically touching towards the vertex, distinct patches of long hair on the face, and narrow parafacials.

The female of *peringueyi*, if found, is likely to be darker than the male and could prove close, in general appearance, to *caffra* or one of the forms of *angulata*.

Philoliche (Ommatiosteres) stuckenbergi sp. n.

Description: Holotype ♀.

Head: Frons (Fig. 29) parallel sided (index 2), brown pollinose (somewhat paler basally and darker at vertex) with yellow-brown hairs. Subcallus, face and parafacials yellowish-grey pollinose, face with cream-coloured hairs. Buccae subshining dark brown with dark hairs. Beard cream-coloured. Occipital rim cream-coloured with yellow-brown hairs. Antennae (Fig. 30); scape and pedicel red-brown with grey tomentum and with dark hairs, scape also with long yellow-brown hairs, flagellum distinctly broad at base, red-brown appearing greyish at certain angles. Palpi (Fig. 31) dark brown with concolorous hairs, noticeably long and slender. Proboscis (Fig. 32) short with stout labellae, about as long as head is high, black.

Thorax: Mesonotum grey-brown pollinose with narrow paler sublateral stripes anteriorly and along transverse suture, entirely yellow-brown haired. Notopleural lobe, postalar callus and scutellum similar to adjoining areas of mesonotum. Pleura and coxae grey with cream coloured hairs except for mesopleuron which has yellow-brown hairs. Femora black-brown with mixed dark and brassy hairs, those on fore femur mostly dark and those on hind femur mostly brassy. Tibiae and tarsi brown with black hairs, not sharply contrasting with femora. Wings smoky, costal cell, stigma and extreme base of wing yellowed but wings not distinctly patterned. Vein R_4 with appendix, R_5 without angle or appendix. Squamae pale yellow. Halteres brown with knob pale at tip.

Abdomen: Tergite 1 grey pollinose with pale hind-margin, somewhat orange laterally, with light brown hairs. Tergite 2 black-brown with greyish hind-margin, which is expanded medially into an obscure triangle, becoming white laterally. Tergite 3 black-brown with light brown hind-margin, hairs dark except for golden hairs on hind-margin. Tergites 4 and 5 similar but hairs becoming whitish laterally on hind-margin. Tergites 6 and 7 black-brown with whitish tufts of hair laterally. Sternite 1 grey with whitish hairs. Sternite 2 mostly whitish with white hairs. Rest of sternites black-brown with dark hairs except for hind-margins which have cream-coloured hairs.

Lengths: Body 12,5 mm, wing 11,0 mm.

Description of ♂: Eyes joined along upper half, separated below leaving a triangular light grey pollinose area. Vertex without tubercle. Otherwise similar to ♀.

Material examined: Holotype ♀: SOUTH AFRICA, N. Transvaal, Entabeni Forest Station, Zoutpansberg Range, i.1975, B. R. Stuckenberg (NM). Paratypes: 1 ♀, same data as holotype, BMNH; 1 ♂, Pietersberg, Malta Forest, i.1928, G. van Someren, NM; 6 ♂, Kranskop, 3,400′, 9.i.1965, B. R. Stuckenberg & E. van Dijk, NM, BMNH; 1 ♂, no data, NM; 2 ♀, Natal, Entumeni Nature Reserve, Eshowe Dist., 2831Cd, 670 m, 7.xii.1977, J. G. H. Londt, NM. Natal Museum Type No. NM 2578.

Remarks: The distinctive proboscis will distinguish this species from all other *Ommatiosteres* except for *rodhaini* Bequaert which has the abdomen entirely dark brown and is only known from Zaïre.

Philoliche (Buplex) nigricornis Bigot **stat. rev.**

Corizoneura nigricornis Bigot, 1892: 614.
Philoliche (Ommatiosteres) nigricornis Bigot, Mackerras 1960: 148 (as syn. of *lateralis* Fabricius).
Philoliche (Buplex) brincki Oldroyd **syn. n.**

Corizoneura nigricornis Bigot was described from 'Australie'. Mackerras (1960: 148) established that *nigricornis* was not Australian but African; he placed it as a synonym of *P.(O.) lateralis* Fabricius. The holotype (in BMNH) is in poor condition, being mouldy with some pest damage, and the head has been glued on although I am satisfied that it has not been substituted. Removal of mould from the vertex revealed the presence of 3 raised ocelli thus removing it from *Ommatiosteres* and placing it in subgenus *Buplex* where it is identifiable with *brincki* Oldroyd which it thus preoccupies. A similar specimen from the Bigot collection was also found with the type of *nigricornis* but it is not considered to be a type since Bigot says his description was based on one specimen. The species was inadvertently omitted from Chainey & Oldroyd (1980).

Revised key to species of *Philoliche (Ommatiosteres)*, both sexes.
Adapted from Oldroyd (1957).

1 Vein R_5 with an angle and often with a stump vein or appendix 2
– Vein R_5 smoothly curved, without appendix 17
2 Tip of abdomen orange, with golden hairs 3
– Tip of abdomen not orange, golden hairs few or absent 7
3 Legs entirely red-brown or orange with mostly golden hairs 4
– Legs entirely black-brown with mostly black hairs..................... 6
4 Species with prominent white bands on all tergites .... **bricchettii** Bezzi
– Species with prominent white band only on tergite 2.................... 5
5 Larger, black-brown, paler haired species. Flagellum 8 segmented............ **omanensis** sp. n.
– Smaller, red-brown, golden haired species. Flagellum 7 segmented **flava** sp. n.
6 Larger species with broader, more divergent frons and higher subcallus (Fig. 26). Proboscis as Fig. 28. Thorax shining black, pitted at base of hairs. Wings with at least some yellow basally and axillary cell contrastingly clear .... **beckeri** Bezzi
– Smaller species with narrower, parallel frons and lower subcallus (Fig. 25). Proboscis as Fig. 24. Thorax grey pollinose, not strikingly pitted at base of hairs. Wings brown without yellow basally and axillary cell not contrastingly clear .... **littoralis** Oldroyd
7 At least hind-legs unicolorous black-brown, fore and mid-tibiae sometimes slightly paler than the femora but this is not in sharp contrast 8
– Legs strongly bicoloured—dark brown femora and contrasting orange tibiae. 13
8 Wings clear or faintly smoky; without contrasting yellow area basally (costal cell sometimes yellowed).. 9
– Wings dark brown, with a large contrasting yellow area basally 12....... 9
9 Males 10
– Females 11
10 Eyes clearly separated along entire length, face without conspicuous patches of long hair laterally. Fore- and mid-tibiae paler than femora. Abdomen extensively orange .... **peringueyi** sp. n.
– Eyes practically touching towards vertex. Face with conspicuous patches of long hairs laterally. Legs unicolorous black-brown. Abdomen mainly blackish, sometimes obscurely reddish basally.................... **angulata** Fabricius
11 Larger species (15,5–17 mm), labella of proboscis slender (as Fig. 11)......... **angulata** Fabricius
– Smaller species (12 mm), labella globular (Fig. 14) .... **londti** sp. n.

12 Grey tomentum of abdomen thin, and confined to lateral thirds of each segment leaving an indistinct, broad, black median band; no transverse bands or median spots .... **lautissima** Austen

– Abdomen with one or more transverse bands of white tomentum .... **elongata** Ricardo

13 Tergites with white pattern only on first two segments—otherwise entirely black .... **discors** Austen

– Tergites with at least some pale pattern on all segments 14

14 Apical area of wing dark smoky-brown, clearly contrasting with yellow basal areas 15

– Apical area of wing almost clear, not clearly differentiated from yellowed areas along costa and extreme base of wing 16

15 Antennae red-brown basally, becoming black at tip. Tergite 1 extensively white; rest of tergites with golden haired triangles medially but without continuous white hind-margins .... **nitida** Usher

– Antennae entirely orange. Tergite 1 black-brown through dense golden hairs; rest of tergites with continuous white hind-margins but without golden haired median triangles .... **flavitibialis** sp. n.

16 ♀ frons with mostly black hairs. Tibiae yellow-brown with dark hairs. ♂ tergites 1–3 orange-brown laterally, leaving a broad median blackish stripe ...... **marriotti** Usher

– ♀ frons with mostly golden-yellow hairs. Tibiae bright orange with concolorous hairs. ♂ tergites 1–3 mostly orange-brown with, at most, only small dark median marks basally.................................. **caffra** Macquart

17 Small (7–12 mm) bee-like species with black oval abdomen which has conspicuous white hind-margins on all segments. Both sexes with very broad frons (index at most 1), inner eye margins only slightly divergent along their entire length. .... **atricornis** Wiedemann

– Not with the above combination of characters 18

18 Males 19

– Females 25

19 A distinct raised tubercle at vertex 20

– No raised tubercle at vertex 23

20 Femora black or with thick grey tomentum, or if not then mesonotum conspicuously patterned .... (**Buplex** sp.)

– Femora orange, at most darkened at apices. Mesonotum inconspicuously marked. 21

21 Face entirely pollinose (beware worn specimens). Fore-tarsi (Fig. 6) shorter and broader, claws and pulvilli conspicuously large .... **hispanica** Krober

– Face with at least median part shining. Fore-tarsi (Fig. 5) longer and more slender, claws and pulvilli not conspicuously large 22

22 Eyes entirely separated, albeit narrowly. Wings uniformly light brown tinted. **lateralis** Fabricius

– Eyes touching for a short distance, just before vertex. Wings clear except for light brown costal cell and faint light brown median band running through apices of basal cells .... **ingrata** Oldroyd

23 Species with shorter, stout proboscis—length generally less than height of head. . . . . **stuckenbergi** sp. n.
– Species with longer, slender proboscis—length well over height of head . . . 24
24 Legs bicoloured—femora black-brown and tibiae yellow-brown . . . . **marriotti** Usher
– Legs unicolorous—femora and tibiae black-brown . . . . **comata** Austen
25 Femora orange, at most darkened at apices 26
– Femora entirely black 28
26 Subcallus without hairs at sides. Face entirely pollinose (beware worn specimens) . . . . **hispanica** Krober
– Subcallus hairy laterally. Face shining medially 27
27 Femora darkened at apices. Wings light brown along veins, in particular along costa and through apices of basal cells, otherwise clear. A predominantly blackish species with whitish hind-margins on all tergites—that on tergite 2 not expanded medially . . . . **ingrata** Oldroyd
– Femora entirely orange. Wings uniformly light brown. Abdomen extensively red-brown, at least basally, with white hind-margins only on tergites 2 and 4—that on tergite 2 sometimes incomplete but always expanded medially . . . . **lateralis** Fabricius
28 At least fore- and mid-tibiae distinctly paler than femora 29
– Legs entirely black-brown 31
29 Dark brown species with slender proboscis (cf. Fig. 24). **acutipalpis** Enderlein
– Mainly black and white species with slender or stout (Fig. 32) proboscis . . . 30
30 Species with shorter, stout proboscis—length less than height of head. Abdomen without orange-brown colour basally . . . . **stuckenbergi** sp. n.
– Species with longer, slender proboscis—length well over height of head. Abdomen with at least tergite 2 laterally and sternite 2 orange-brown. . . . . **marriotti** Usher
31 Rather slender species with relatively long tapering abdomen (sometimes telescoped inwards). Proboscis slender (Fig. 24). Wings light yellow-brown. Tergite 1 with mostly whitish hairs . . . . **comata** Austen
– Stouter species with abdomen of usual proportions. Proboscis stout (Fig. 33). Wings dark brown. Tergite 1 with black hairs . . . . **rodhaini** Bequaert

Note. Males of the following species are unknown: *acutipalpis, bricchettii, discors, flava, flavitibialis, londti, nitida, omanensis* and *rodhaini*. The female of *peringueyi* is also unknown.

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